

FIG. 1

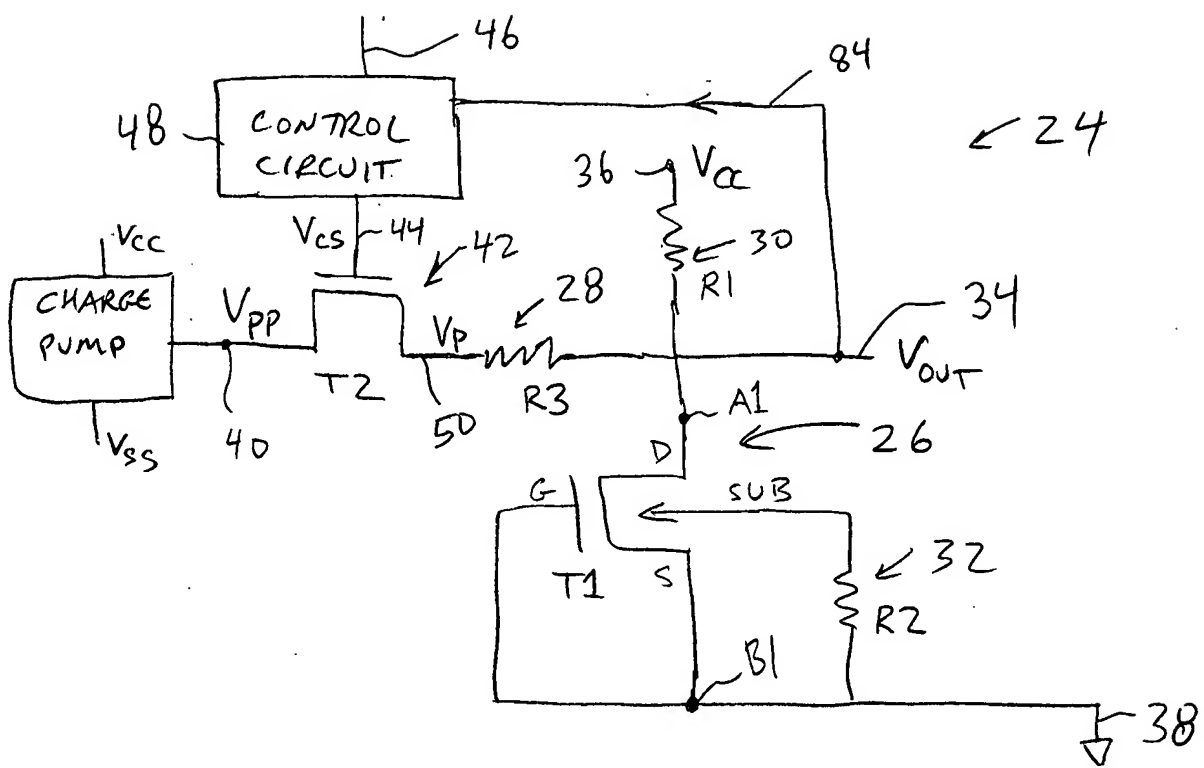


FIG. 2

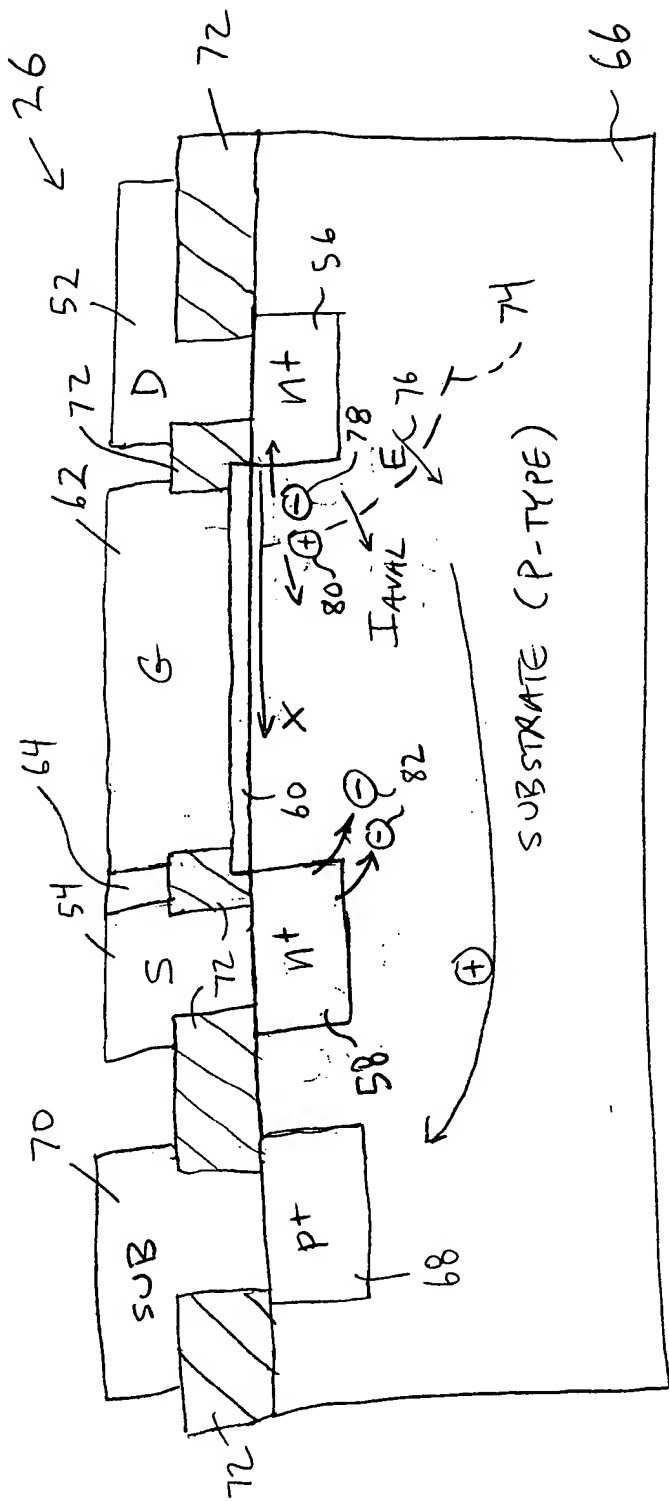


FIG. 3

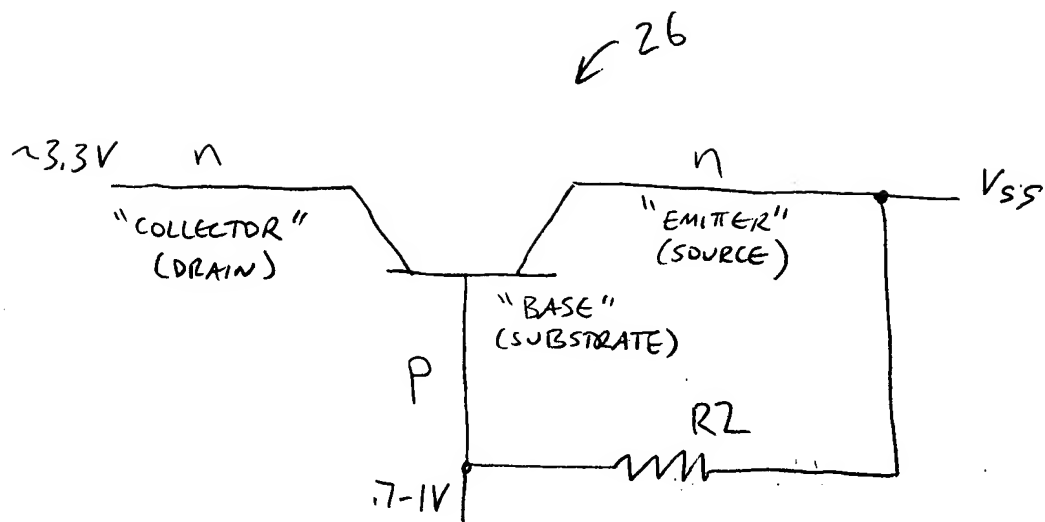


FIG. 4

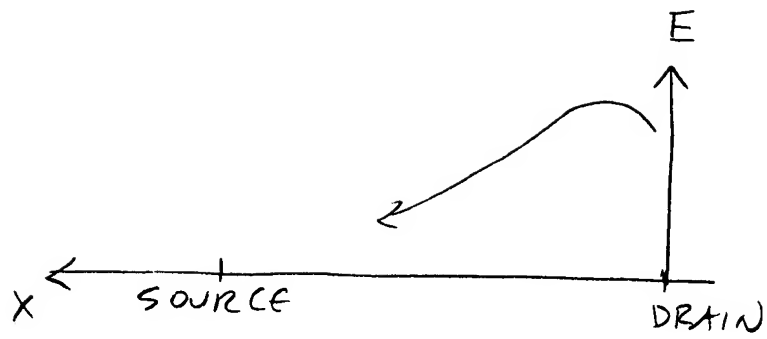


FIG. 5a

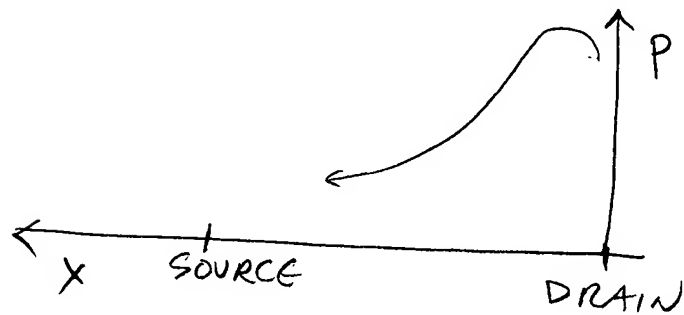


FIG. 5b

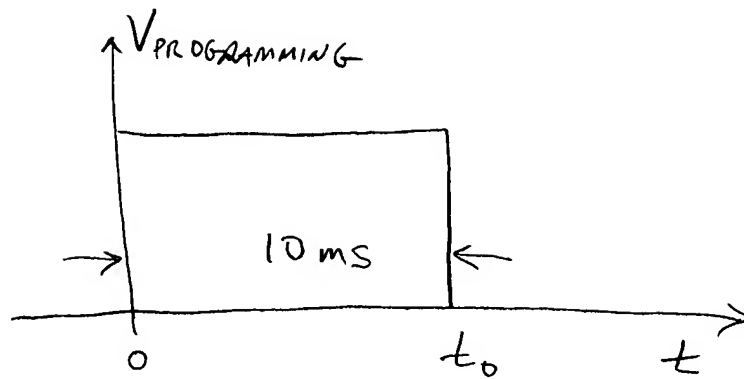


FIG. 6a

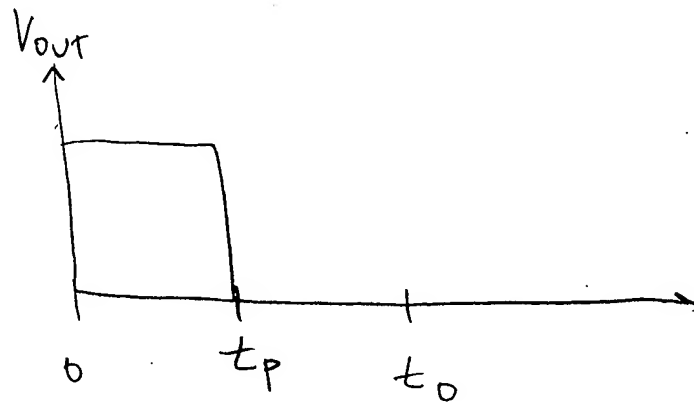


FIG. 6b



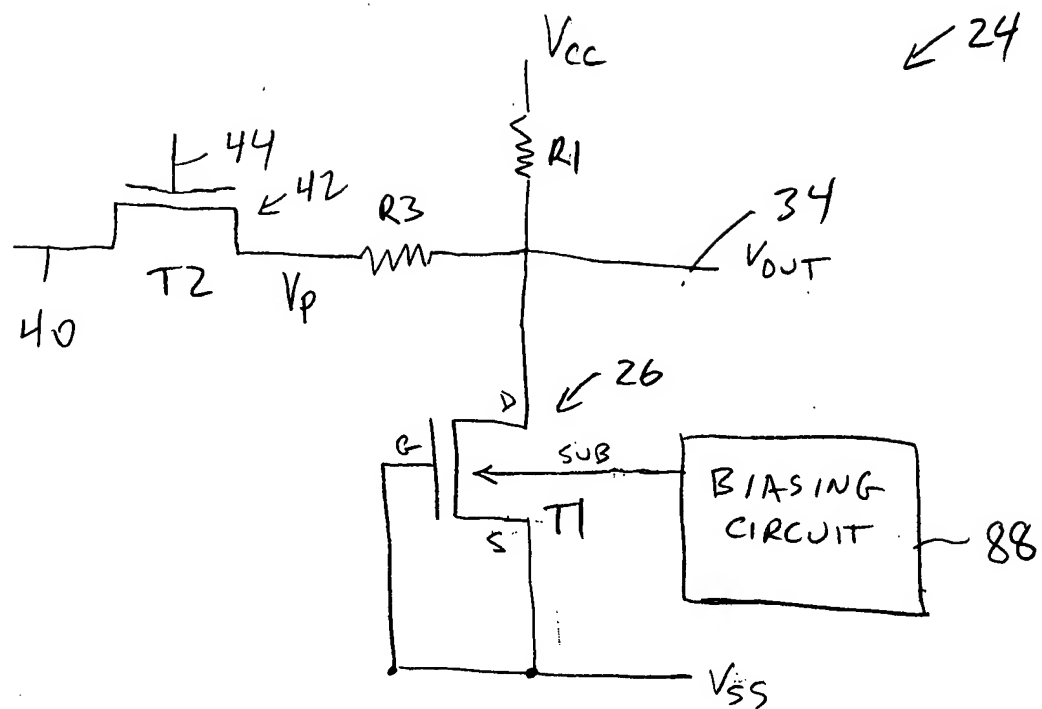


FIG. 8



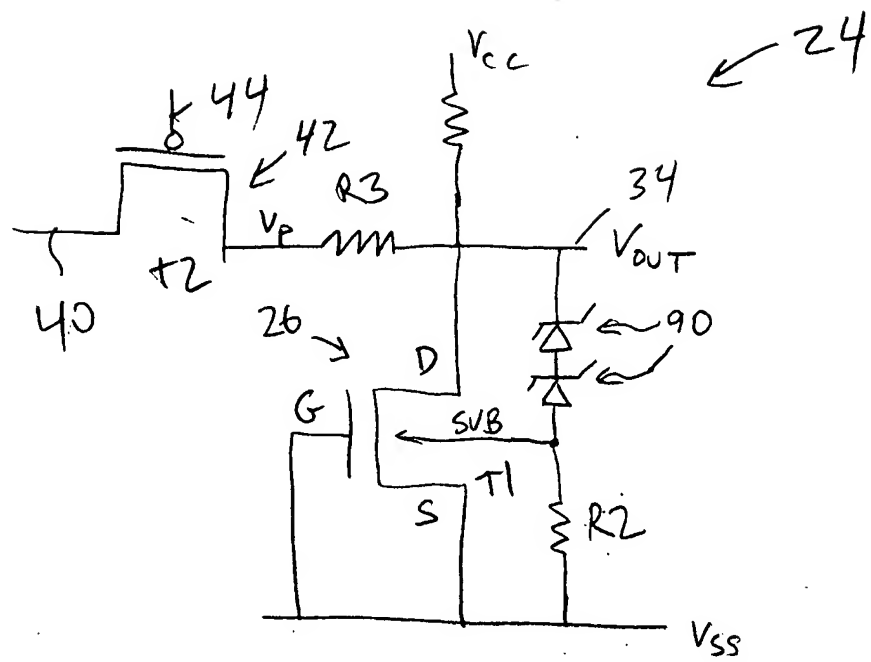
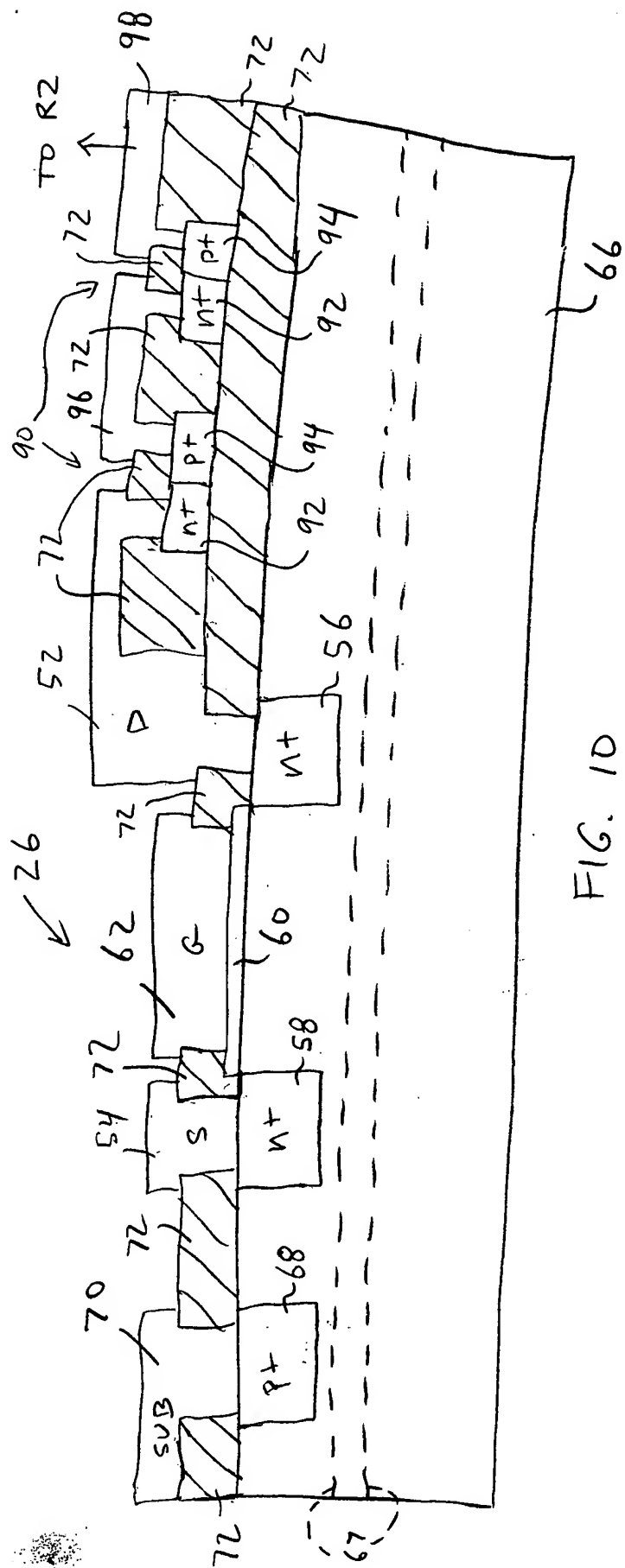


FIG. 9



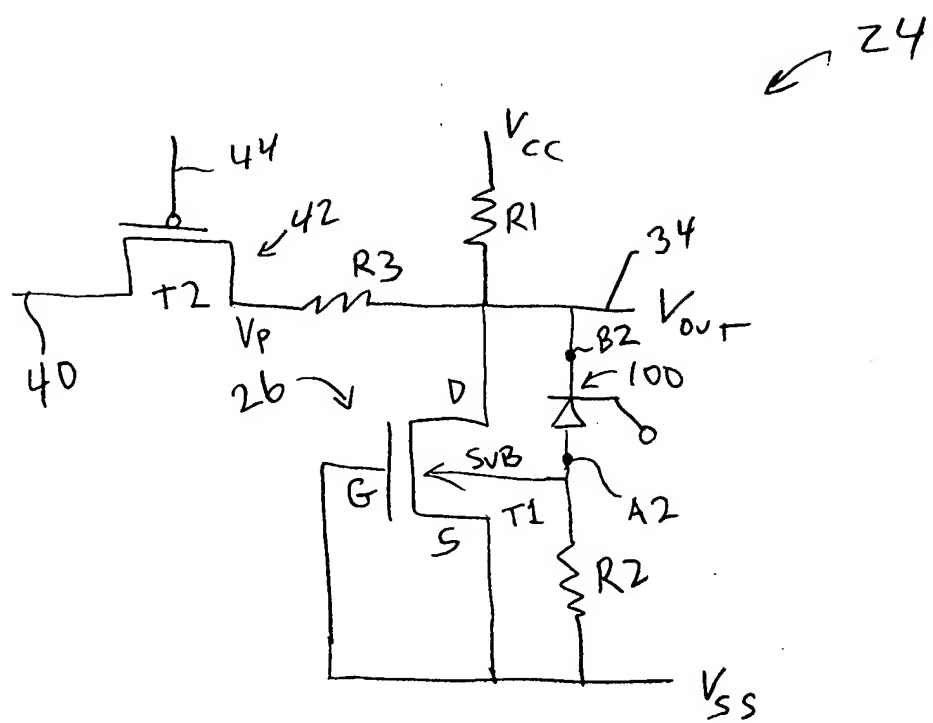
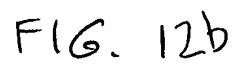
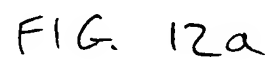


FIG. 11



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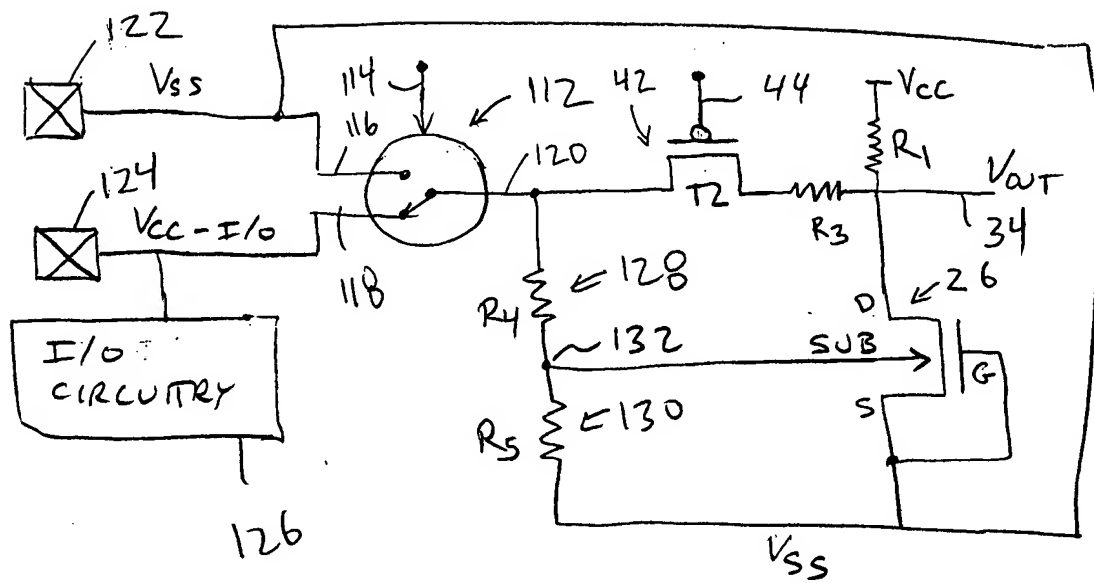


FIG. 13

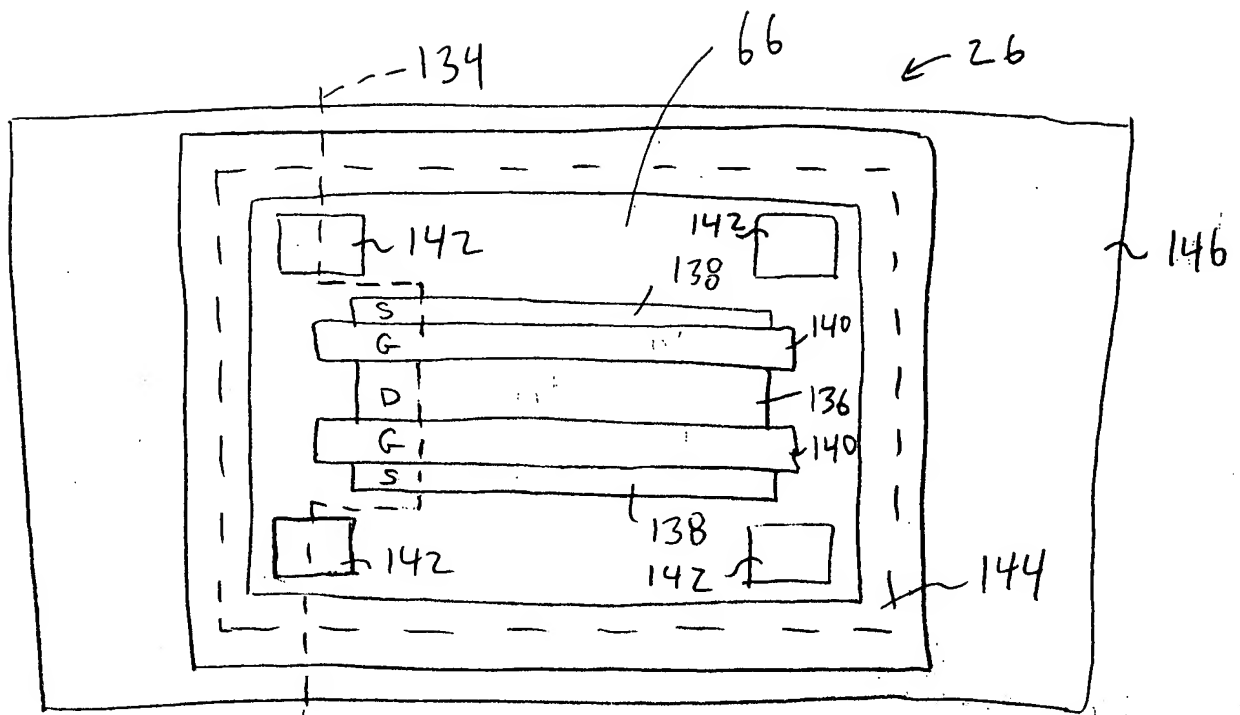


FIG. 14a

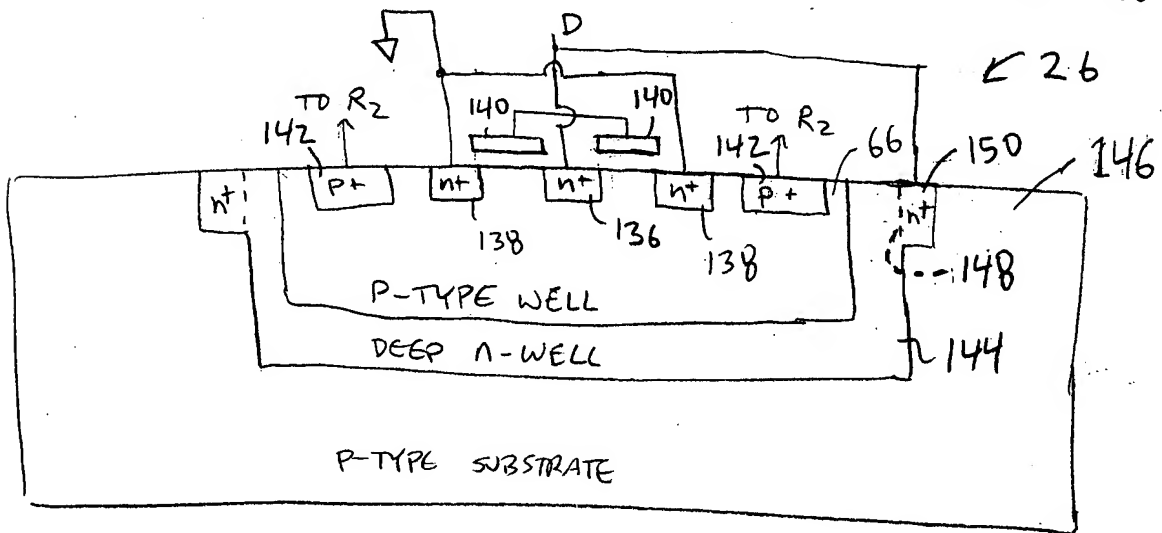


FIG. 14b

APPLY PROGRAMMING  
VOLTAGE ACROSS  
ANTIFUSE (I.E., APPLY  
 $V_{CC}$  TO DRAIN AND  $V_{SS}$  TO  
SOURCE AND GATE) ~ 152

↓

WHILE APPLYING  
PROGRAMMING VOLTAGE  
ACROSS ANTIFUSE, FORWARD  
BIAS SUBSTRATE-SOURCE  
JUNCTION TO ASSIST IN  
TURNING ANTIFUSE ON ~ 154

↓

CONTINUE APPLYING  
PROGRAMMING VOLTAGE  
AND BIASING SUBSTRATE  
TO PRODUCE HOT CARRIERS  
AT PORTION OF CHANNEL  
NEAR DRAIN ~ 156

↓

MONITORE OUTPUT VOLTAGE  
TO DETERMINE WHEN  
GATE OXIDE HAS BROKEN DOWN  
OR STOP PROGRAMMING AT  
PREDETERMINED TIME (E.G., 10ms) ~ 158

FIG. 15